

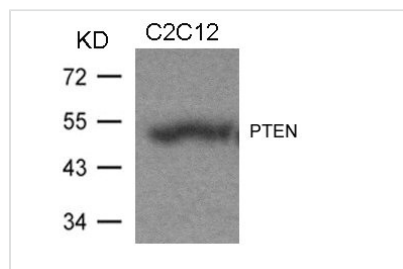


PTEN (Ab-370) Antibody

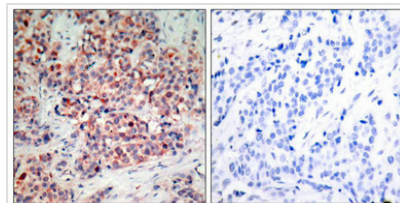
Product Code	CSB-PA000679
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P60484
Immunogen	Peptide sequence around aa.368~372 (D-V-S-D-N) derived from Human PTEN.
Raised In	Rabbit
Species Reactivity	Human,Mouse,Rat
Specificity	The antibody detects endogenous level of total PTEN protein.
Tested Applications	ELISA,WB,IHC;WB:1:500-1:1000,IHC:1:50-1:200
Relevance	Tumor suppressor. Acts as a dual-specificity protein phosphatase, dephosphorylating tyrosine-, serine- and threonine-phosphorylated proteins. Also acts as a lipid phosphatase, removing the phosphate in the D3 position of the inositol ring from phosphatidylinositol 3,4,5-trisphosphate, phosphatidylinositol 3,4-diphosphate, phosphatidylinositol 3-phosphate and inositol 1,3,4,5-tetrakisphosphate with order of substrate preference in vitro $\text{PtdIns}(3,4,5)\text{P}_3 > \text{PtdIns}(3,4)\text{P}_2 > \text{PtdIns}3\text{P} > \text{Ins}(1,3,4,5)\text{P}_4$. The lipid phosphatase activity is critical for its tumor suppressor function. Antagonizes the PI3K-AKT/PKB signaling pathway by dephosphorylating phosphoinositides and thereby modulating cell cycle progression and cell survival. The unphosphorylated form cooperates with AIP1 to suppress AKT1 activation. Dephosphorylates tyrosine-phosphorylated focal adhesion kinase and inhibits cell migration and integrin-mediated cell spreading and focal adhesion formation. May be a negative regulator of insulin signaling and glucose metabolism in adipose tissue. Al-Khoury AM, et al. (2005). J Biol Chem. 280 (42):35195-35202. Miller SJ, et al. (2002). FEBS Lett. 528 (1-3): 145-153. Torres J, et al. (2001). J Biol Chem.276 (2): 993-998. Vazquez F, et al. (2000). Mol Cell Biol.20 (14): 5010-5018.
Form	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg^{2+} and Ca^{2+}), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Clonality	Polyclonal
Alias	MMAC1; Mutated in multiple advanced cancers 1; Protein-tyrosine phosphatase PTEN; TEP1;
Product Type	Polyclonal Antibody
Species	Homo sapiens (Human)
Target Names	PTEN



Image



Western blot analysis of extracts from C2C12 cells using PTEN(Ab-370) Antibody.



Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using PTEN(Ab-370) Antibody(left) or the same antibody preincubated with blocking peptide(right).